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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/644,797	08/24/2000	Hisashi Amafuji	D-990	2917
32628 7590 09/15/2011 KANESAKA BERNER AND PARTNERS LLP 1700 DIAGONAL RD SUITE 310 ALEXANDRIA, VA 22314-2848				
EXAMINER KUMAR, SRILAKSHMI K				
ART UNIT		PAPER NUMBER		
2629				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/644,797

**Applicant(s)**

AMAFUJI ET AL.

**Examiner**

SRILAKSHMI K. KUMAR

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 June 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-836)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The following office action is in response to the amendment filed on 6/22/2011. Claims 1-4, 6-8 are pending. Claims 1, 2 and 4 have been amended.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Natoli et al (US 6,388,657).

As to independent claim 1, Natoli et al teaches a body mounting display system (Fig. 1), comprising: a display device to be worn by a user (Fig. 1 VR LCD Headset) and having at least one interface (Fig. 1, VR gloves), computer (Fig. 1, second processor which is the computer as shown in Fig. 2) situated away from the display device and having a bus line for outputting signals corresponding to at least display data (Fig. 2 teaches where the computer is situated

away, in Fig. 4, where signals are sent), said computer transmitting a plurality of different kinds of signals (col. 7, line 40-col. 8, line 15); and a radio transmission device disposed between the display device and the computer (col. 7, line 40-col. 8, line 15, 40-col. 9, line 35), and including a computer side output transmission circuit connected to the display device through the at least one interface so that the signals at the computer passing through the bus (col. 6, lines 1-10 teach wireless transmissions, col. 7, line 40-col. 9, line 35), and a body line output transmission circuit (Fig. 1, col. 5, lines 28-col. 6, line 45), wherein the body line output transmission circuit is adapted to be worn by the user (col. 5, lines 52-60)), and is connected to the display device through at least one interface (through connection to the lcd on the headset), and the signals at the computer passing through the bus line are transmitted wirelessly from the computer side output transmission circuit to the body side output transmission circuit, and are restored at the user side to be displayed at the display device through the at least one interface without processing (col. 2, lines 38-49 and col. 5, lines 28-col. 9, line 35).

As to independent claim 4, Natoli et al teaches a body mounting display system (Fig. 1), comprising a display device to be worn by the user (Fig. 1, VR LCD Headset); an image output interface to be worn by the user connected to the display device (col. 2, lines 38-49 and col. 7, lines 40-col. 9, line 35), a computer located away from the display device (Fig. 2, where the computer is situated away) for outputting signal corresponding to display data for the display device and having a bus line (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said computer transmitting a plurality of different signals (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), and a signal transmission device disposed between the display device and the computer, and including a computer side output transmission circuit

connected to the computer through the bus line (Fig. 1, col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35) and a body side output transmission circuit to be worn by the user (col. 5, lines 28-60) connected to the display device through the image output interface, said body side output transmission circuit being connected to the computer side output transmission circuit wirelessly (col. 5, lines 28-60), wherein said computer side output transmission circuit includes a first buffer memory to which data corresponding to the signal through the bus line is written by the computer (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), a first reading device for reading the data stored in the first buffer memory and converting the data to communication signals (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said body side output transmission circuit includes a first receiving device for receiving the communication signals sent from the first sending device as they are and a first restoring device for restoring the received communication signals to signals corresponding to the signals outputted through the bus line (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said signals of the computer being wirelessly transferred to the body side output transmission circuit are only restored at the body side without processing and being processed to obtain each kind of signals at the user side (col. 2, lines 38-49 and col. 5, lines 28-67, col. 7, lines 40-col. 9, line 35), said image output interface processing and producing signals at the user side for actuating the display device based on the communication signals (col. 6, line 1-63).

As to dependent claims 2 and 3, see rejection of claim 4, above.

***Allowable Subject Matter***

3. Claims 6-8 are allowed.

***Response to Arguments***

Applicant's arguments filed 6/22/2011 have been fully considered but they are not persuasive.

With respect to the 112 second paragraph rejections, these rejections have been withdrawn as applicant has amended the claims to clarify the invention.

Applicant argues where the prior art of Natoli et al do not teach where a body side output transmission circuit which is worn by the user and where the body side only converts signals without processing to the computer side. Examiner, respectfully, disagrees. In col. 6, lines 27-63, Natoli et al teaches where the first processor processes the virtual reality key inputs into proper code for use by the second processor, then the first processor outputs these code signals to the second processor. The second processor processes the input signals to determine which application programs are being actuated/selected. As taught by Natoli, the second processor does the full processing of the inputs and then sends them to through the first processor to the LCD of the VR headset for display.

Applicant argues where the first processor processes VR signals whereas the applicant's invention only converts signals without processing. Examiner, respectfully, disagrees. When signals are converted, processing is accomplished. To one of ordinary skill in the art, converting of signals includes some sort of processing to change signals from one type to another. Therefore as broadly interpreted and understood, the converting and processing are the same, thus Natoli teaches what is claimed.

Therefore, the claimed invention is taught by Natoli and the rejection is maintained and made FINAL.

***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRILAKSHMI K. KUMAR whose telephone number is (571)272-7769. The examiner can normally be reached on 7:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SRILAKSHMI K KUMAR/  
Primary Examiner  
Art Unit 2629

September 4, 2011